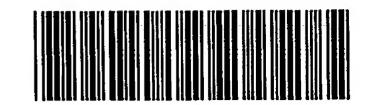# RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: _10/521,313A_

Source: _PU/10_

Date Processed by STIC: _9/2/05_

ENTERED

PCT

RAW SEQUENCE LISTING   DATE: 09/02/2005
PATENT APPLICATION: US/10/521,313A   TIME: 14:17:03

Input Set : **A:\Q85741 Sequence Listing.txt**
Output Set: **N:\CRF4\09012005\J521313A.raw**

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       5 <120> TITLE OF INVENTION: Her-2/neu DNA VACCINE HAVING ANTI-CANCER ACTIVITY
       7 <130> FILE REFERENCE: PCA30540/PAN/PCT
C-->   9 <140> CURRENT APPLICATION NUMBER: US/10/521,313A
C-->   9 <141> CURRENT FILING DATE: 2005-01-14
       9 <150> PRIOR APPLICATION NUMBER: KR2002-41764
      10 <151> PRIOR FILING DATE: 2002-07-16
      12 <150> PRIOR APPLICATION NUMBER: KR2003-38012
      13 <151> PRIOR FILING DATE: 2003-06-12
      15 <160> NUMBER OF SEQ ID NOS: 24
      17 <170> SOFTWARE: KopatentIn 1.71
      19 <210> SEQ ID NO: 1
      20 <211> LENGTH: 4530
      21 <212> TYPE: DNA
      22 <213> ORGANISM: human Her-2/neu gene cDNA
      24 <400> SEQUENCE: 1
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      27 cccggccccc acccctcgca gcaccccgcg ccccgcgccc tcccagccgg gtccagccgg   120
      29 agccatgggg ccggagccgc agtgagcacc atggagctgg cggccttgtg ccgctggggg   180
      31 ctcctcctcg ccctcttgcc ccccggagcc gcgagcaccc aagtgtgcac cggcacagac   240
      33 atgaagctgc ggctccctgc cagtcccgag acccacctgg acatgctccg ccacctctac   300
      35 cagggctgcc aggtggtgca gggaaacctg gaactcacct acctgcccac caatgccagc   360
      37 ctgtccttcc tgcaggatat ccaggaggtg cagggctacg tgctcatcgc tcacaaccaa   420
      39 gtgaggcagg tcccactgca gaggctgcgg attgtgcgag cacccagct ctttgaggac   480
      41 aactatgccc tggccgtgct agacaatgga gacccgctga caataccac ccctgtcaca   540
      43 ggggcctccc caggaggcct gcgggagctg cagcttcgaa gcctcacaga gatcttgaaa   600
      45 ggaggggtct tgatccagcg gaacccccag ctctgctacc aggacacgat tttgtggaag   660
      47 gacatcttcc acaagaacaa ccagctggct ctcacactga tagacaccaa ccgctctcgg   720
      49 gcctgccacc cctgttctcc gatgtgtaag ggctcccgct gctggggaga gagttctgag   780
      51 gattgtcaga gcctgacgcg cactgtctgt gccggtggct gtgcccgctg caaggggcca   840
      53 ctgcccactg actgctgcca tgagcagtgt gctgccggct gcacgggccc caagcactct   900
      55 gactgcctgg cctgcctcca cttcaaccac agtggcatct gtgagctgca ctgcccagcc   960
      57 ctggtcacct acaacacaga cacgtttgag tccatgccca tcccgagggg ccggtataca  1020
      59 ttcggcgcca gctgtgtgac tgcctgtccc tacaactacc tttctacgga cgtgggatcc  1080
      61 tgcaccctcg tctgccccct gcacaaccaa gaggtgacag cagaggatgg aacacagcgg  1140
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      65 cgagaggtga gggcagttac cagtgccaat atccaggagt ttgctggctg caagaagatc  1260
      67 tttgggagcc tggcatttct gccggagagc tttgatgggg acccagcctc caacactgcc  1320
      69 ccgctccagc cagagcagct ccaagtgttt gagactctgg aagagatcac aggttaccta  1380
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      73 atccggggac gaattctgca caatggcgcc tactcgctga cccctgcaagg gctgggcatc  1500
      75 agctggctgg ggctgcgctc actgagggaa ctgggcagtg gactggcct catccaccat  1560
      77 aacacccacc tctgcttcgt gcacacggtg ccctgggacc agctctttcg gaacccgcac  1620
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Input Set : **A:\Q85741 Sequence Listing.txt**
Output Set: **N:\CRF4\09012005\J521313A.raw**

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 83 tgcagccagt tccttcgggg ccaggagtgc gtggaggaat gccgagtact gcaggggctc   1800
 85 cccagggagt atgtgaatgc caggcactgt ttgccgtgcc accctgagtg tcagccccag   1860
 87 aatggctcag tgacctgttt tggaccggag gctgaccagt gtgtggcctg tgcccactat   1920
 89 aaggaccctc ccttctgcgt ggcccgctgc cccagcggtg tgaaacctga cctctcctac   1980
 91 atgcccatct ggaagtttcc agatgaggag ggcgcatgcc agccttgccc catcaactgc   2040
 93 acccactcct gtgtggacct ggatgacaag ggctgccccg ccgagcagag agccagccct   2100
 95 ctgacgtcca tcgtctctgc ggtggttggc attctgctgg tcgtggtctt gggggtggtc   2160
 97 tttgggatcc tcatcaagcg acggcagcag aagatccgga agtacgat gcggagactg   2220
 99 ctgcaggaaa cggagctggt ggagccgctg acacctagcg gagcgatgcc caaccaggcg   2280
101 cagatgcgga tcctgaaaga gacggagctg aggaaggtga aggtgcttgg atctggcgct   2340
103 tttggcacag tctacaaggg catctggatc cctgatgggg agaatgtgaa aattccagtg   2400
105 gccatcaaag tgttgaggga aaacacatcc cccaaagcca acaaagaaat cttagacgaa   2460
107 gcatacgtga tggctggtgt gggctcccca tatgtctccc gccttctggg catctgcctg   2520
109 acatccacgg tgcagctggt gacacagctt atgccctatg gctgcctctt agaccatgtc   2580
111 cgggaaaacc gcggacgcct gggctcccag gacctgctga actggtgtat gcagattgcc   2640
113 aagggggatga gctacctgga ggatgtgcgg ctcgtacaca gggacttggc cgctcggaac   2700
115 gtgctggtca agagtcccaa ccatgtcaaa attacagact tcgggctggc tcggctgctg   2760
117 gacattgacg agacagagta ccatgcagat gggggcaagg tgcccatcaa gtggatggcg   2820
119 ctggagtcca ttctccgccg gcggttcacc caccagagtg atgtgtggag ttatggtgtg   2880
121 actgtgtggg agctgatgac ttttgggggcc aaaccttacg atgggatccc agcccgggag   2940
123 atccctgacc tgctggaaaa gggggagcgg ctgccccagc cccccatctg caccattgat   3000
125 gtctacatga tcatggtcaa atgttggatg attgactctg aatgtcggcc aagattccgg   3060
127 gagttggtgt ctgaattctc ccgcatggcc agggaccccc agcgctttgt ggtcatccag   3120
129 aatgaggact tgggcccagc cagtccttg gacagcacct tctaccgctc actgctggag   3180
131 gacgatgaca tggggggacct ggtggatgct gaggagtatc tggtacccca gcagggcttc   3240
133 ttctgtccag accctgcccc gggcgctggg ggcatggtcc accacaggca ccgcagctca   3300
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137 cccaggtctc cactggcacc ctccgaaggg gctggctccg atgtatttga tggtgacctg   3420
139 ggaatggggg cagccaaggg gctgcaaagc ctccccacac atgaccccag ccctctacag   3480
141 cggtacagtg aggaccccac agtacccctg ccctctgaga ctgatggcta cgttgccccc   3540
143 ctgacctgca gccccagcc tgaatatgtg aaccagccag atgttcggcc ccagcccct   3600
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167 cggccctaag ggagtgtcta agaacaaaag cgacccattc agagactgtc cctgaaacct   4320
169 agtactgccc cccatgagga aggaacagca atggtgtcag tatccaggct ttgtacagag   4380
171 tgctttttctg tttagttttt actttttttg ttttgttttt ttaaagacga aataaagacc   4440
173 caggggagaa tgggtgttgt atggggaggc aagtgtgggg ggtccttctc cacacccact   4500
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175 ttgtccattt gcaaatatat tttggaaaac
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RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/521,313A

DATE: 09/02/2005
TIME: 14:17:03

Input Set : **A:\Q85741 Sequence Listing.txt**
Output Set: **N:\CRF4\09012005\J521313A.raw**

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178 <210> SEQ ID NO: 2
179 <211> LENGTH: 2052
180 <212> TYPE: DNA
181 <213> ORGANISM: human Her-2/neu gene without intracellular region
183 <400> SEQUENCE: 2
184 atggagctgg cggccttgtg ccgctggggg ctcctcctcg ccctcttgcc ccccggagcc      60
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188 acccacctgg acatgctccg ccacctctac cagggctgcc aggtggtgca gggaaacctg     180
190 gaactcacct acctgcccac caatgccagc ctgtccttcc tgcaggatat ccaggaggtg     240
192 cagggctacg tgctcatcgc tcacaaccaa gtgaggcagg tcccactgca gaggctgcgg     300
194 attgtgcgag gcacccagct ctttgaggac aactatgccc tggccgtgct agacaatgga     360
196 gacccgctga acaataccac ccctgtcaca ggggcctccc caggaggcct gcgggagctg     420
198 cagcttcgaa gcctcacaga gatcttgaaa ggaggggtct tgatccagcg gaacccccag     480
200 ctctgctacc aggacacgat tttgtggaag gacatcttcc acaagaacaa ccagctggct     540
202 ctcacactga tagacaccaa ccgctctcgg gcctgccacc cctgttctcc gatgtgtaag     600
204 ggctcccgct gctggggaga gagttctgag gattgtcaga gcctgacgcg cactgtctgt     660
206 gccggtggct gtgcccgctg caaggggcca ctgcccactg actgctgcca tgagcagtgt     720
208 gctgccggct gcacgggccc caagcactct gactgcctgg cctgcctcca cttcaaccac     780
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212 tccatgccca atcccgaggg ccggtataca ttcggcgcca gctgtgtgac tgcctgtccc     900
214 tacaactacc tttctacgga cgtgggatcc tgcaccctcg tctgcccccт gcacaaccaa     960
216 gaggtgacag cagaggatgg aacacagcgg tgtgagaagt gcagcaagcc ctgtgcccga    1020
218 gtgtgctatg gtctgggcat ggagcacttg cgagaggtga gggcagttac cagtgccaat    1080
220 atccaggagt ttgctggctg caagaagatc tttgggagcc tggcatttct gccggagagc    1140
222 tttgatgggg acccagcctc caacactgcc ccgctccagc cagagcagct ccaagtgttt    1200
224 gagactctgg aagagatcac aggttaccta tacatctcag catggccgga cagcctgcct    1260
226 gacctcagcg tcttccagaa cctgcaagta tccggggac gaattctgca caatggcgcc    1320
228 tactcgctga ccctgcaagg gctgggcatc agctggctgg ggctgcgctc actgagggaa    1380
230 ctgggcagtg gactggccct catccaccat aacacccacc tctgcttcgt gcacacggtg    1440
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248 ggctgccccg ccgagcagag agccagccct ctgacgtcca tcgtctctgc ggtggttggc    1980
250 attctgctgg tcgtggtctt gggggtggtc tttgggatcc tcatcaagcg acggcagcag    2040
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256 <211> LENGTH: 1956
257 <212> TYPE: DNA
258 <213> ORGANISM: human Her-2/neu gene without intracellular region and transmembrane
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260 <400> SEQUENCE: 3
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263 gcgagcaccc aagtgtgcac cggcacagac atgaagctgc ggctccctgc cagtcccgag     120
265 acccacctgg acatgctccg ccacctctac cagggctgcc aggtggtgca gggaaacctg     180
267 gaactcacct acctgcccac caatgccagc ctgtccttcc tgcaggatat ccaggaggtg     240
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269 cagggctacg tgctcatcgc tcacaaccaa gtgaggcagg tcccactgca gaggctgcgg    300
271 attgtgcgag gcacccagct ctttgaggac aactatgccc tggccgtgct agacaatgga    360
273 gacccgctga acaataccac ccctgtcaca ggggcctccc caggaggcct gcgggagctg    420
275 cagcttcgaa gcctcacaga gatcttgaaa ggaggggtct tgatccagcg gaacccccag    480
277 ctctgctacc aggacacgat tttgtggaag gacatcttcc acaagaacaa ccagctggct    540
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281 ggctcccgct gctggggaga gagttctgag gattgtcaga gcctgacgcg cactgtctgt    660
283 gccggtggct gtgcccgctg caaggggcca ctgcccactg actgctgcca tgagcagtgt    720
285 gctgccggct gcacgggccc caagcactct gactgcctgg cctgcctcca cttcaaccac    780
287 agtggcatct gtgagctgca ctgcccagcc ctggtcacct acaacacaga cacgtttgag    840
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291 tacaactacc tttctacgga cgtgggatcc tgcaccctcg tctgccccct gcacaaccaa    960
293 gaggtgacag cagaggatgg aacacagcgg tgtgagaagt gcagcaagcc ctgtgcccga   1020
295 gtgtgctatg gtctgggcat ggagcacttg cgagaggtga gggcagttac cagtgccaat   1080
297 atccaggagt ttgctggctg caagaagatc tttgggagcc tggcatttct gccggagagc   1140
299 tttgatgggg acccagcctc caacactgcc ccgctccagc cagagcagct ccaagtgttt   1200
301 gagactctgg aagagatcac aggttaccta tacatctcag catggccgga cagcctgcct   1260
303 gacctcagcg tcttccagaa cctgcaagta atccggggac gaattctgca caatggcgcc   1320
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309 ccctgggacc agctctttcg gaacccgcac caagctctgc tccacactgc caaccggcca   1500
311 gaggacgagt gtgtgggcga gggcctggcc tgccaccagc tgtgcgcccg agggcactgc   1560
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315 gtggaggaat gccgagtact gcaggggctc cccagggagt atgtgaatgc caggcactgt   1680
317 ttgccgtgcc accctgagtg tcagccccag aatggctcag tgacctgttt tggaccggag   1740
319 gctgaccagt gtgtggcctg tgcccactat aaggaccctc ccttctgcgt ggcccgctgc   1800
321 cccagcggtg tgaaacctga cctctcctac atgcccatct ggaagtttcc agatgaggag   1860
323 ggcgcatgcc agccttgccc catcaactgc acccactcct gtgtggacct ggatgacaag   1920
325 ggctgccccg ccgagcagag agccagccct ctgacg                             1956
328 <210> SEQ ID NO: 4
329 <211> LENGTH: 27
330 <212> TYPE: DNA
331 <213> ORGANISM: Artificial Sequence
333 <220> FEATURE:
334 <223> OTHER INFORMATION: NF6 primer
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342 <211> LENGTH: 31
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344 <213> ORGANISM: Artificial Sequence
346 <220> FEATURE:
347 <223> OTHER INFORMATION: NSR1 primer
350 <400> SEQUENCE: 5
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355 <211> LENGTH: 23
356 <212> TYPE: DNA
357 <213> ORGANISM: Artificial Sequence
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359 <220> FEATURE:
360 <223> OTHER INFORMATION: NF5 primer
363 <400> SEQUENCE: 6
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368 <211> LENGTH: 27
369 <212> TYPE: DNA
370 <213> ORGANISM: Artificial Sequence
372 <220> FEATURE:
373 <223> OTHER INFORMATION: NRM2 primer
376 <400> SEQUENCE: 7
377 ttctagagca gtctccgcat cgtctac                                27
380 <210> SEQ ID NO: 8
381 <211> LENGTH: 28
382 <212> TYPE: DNA
383 <213> ORGANISM: Artificial Sequence
385 <220> FEATURE:
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394 <211> LENGTH: 24
395 <212> TYPE: DNA
396 <213> ORGANISM: Artificial Sequence
398 <220> FEATURE:
399 <223> OTHER INFORMATION: NF3 primer
402 <400> SEQUENCE: 9
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407 <211> LENGTH: 1535
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411 <400> SEQUENCE: 10
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416 tattggtgac ttggtggtga tctagtggtg ccaagagtgt gtttgaacct gacaagacat   180
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422 tcagaggaga agctttacag cctgcaccca gatcctatag ccacatggcc ggtgcctgac   360
424 ccatctcaga agcagaatct ccttgcgcca cagaatgctg tgtcctctga agaaaaggat   420
426 gactttaagc aagaaactct tccaagcaat tccaatgaaa gccatgacca catggacgac   480
428 gatgatgacg atgatgatga cgatggagac catgcagaga gcgaggattc tgtggactcg   540
430 gatgaatctg acgaatctca ccattcggat gagtctgatg agaccgtcac tgctagtaca   600
432 caagcagaca ctttcactcc aatcgtccct acagtcgatg tccccaacgg ccgaggtgat   660
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442 cattccaaag agagccagga gagtgccgat cagtcggatg tgatcgatag tcaagcaagt   960
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RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/10/521,313A

DATE: 09/02/2005
TIME: 14:17:04

Input Set : **A:\Q85741 Sequence Listing.txt**
Output Set: **N:\CRF4\09012005\J521313A.raw**

<u>Invalid Line Length:</u>
The rules require that a line not exceed 72 characters in length. This includes spaces.

Seq#:3; Line(s) 258

VERIFICATION SUMMARY
PATENT APPLICATION: **US/10/521,313A**

DATE: 09/02/2005
TIME: 14:17:04

Input Set : **A:\Q85741 Sequence Listing.txt**
Output Set: **N:\CRF4\09012005\J521313A.raw**

L:9 M:270 C: Current Application Number differs, Replaced Current Application No
L:9 M:271 C: Current Filing Date differs, Replaced Current Filing Date